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10/789,392

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EXAMINER

KUCAB, JAMIE R

ART UNIT

PAPER NUMBER

3621

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DELIVERY MODE

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PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/789,392	<b>Applicant(s)</b> SMITH ET AL.	
	<b>Examiner</b> JAMIE KUCAB	<b>Art Unit</b> 3621	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 24 February 2009.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-3 and 6-21 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-3, 6-21 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                                | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## **DETAILED ACTION**

### ***Acknowledgements***

1. Applicant's response filed February 24, 2009 is acknowledged.
2. Claims 1-3 and 6-21 are pending in the application. Claims 1-3 and 6-21 are examined below.
3. This Office action is given Paper No. 20090512 for reference purposes only.
4. Based on a comparison of the PGPub US 2005/0192877 A1 with Applicant's originally submitted specification, the PGPub appears to be a fair and accurate record of the Applicant's specification. Therefore, if necessary any references in this action to Applicant's specification refer to paragraph numbers in the PGPub.

### ***Claim Objections***

5. Claim 14 is objected to because of the following informalities: where Applicant recites "implemented as instructions", it appears that Applicant intends to recite -- implemented by instructions -- or -- implemented via instructions -- or similar. Where Applicant recites "should a dispute arise and", it appears that Applicant intends to recite -- should a dispute arise; and -- or similar. Where Applicant recites "A method performed by computer system", it appears that Applicant intends to recite -- A method performed by a computer system -- or similar. For the purpose of comparison with the prior art, the Examiner is taking it as such. Appropriate clarification or correction is required.

***Claim Rejections - 35 USC § 112***

6. The following is a quotation of the second paragraph of 35 U.S.C. §112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

7. Claims 1-21 are rejected under 35 U.S.C. §112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

8. Regarding claims 2, 3, 15, and 16, Applicant's recitations "based on willingness of the service provider to be exposed to non-payment by that service consumer" and "indicates the number of services for which the service provider is willing to be exposed to non-payment by the service consumer" would have been unclear to a person having ordinary skill in the art at the time of the invention. Appropriate clarification and/or correction is required.

***Claim Rejections - 35 USC § 103***

9. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

10. Claims 1, 6, 12, 13, and 17, as understood by the Examiner, are rejected under 35 U.S.C. §103(a) as being unpatentable over Briscoe et al. (US Patent No. 6,341,273) in view of either Frankel et al. (US Patent No. 7,184,988, hereafter "Frankel") or Hauser

et al. (Ref U on the form PTO-892 of Paper No. 20081020, hereafter "Hauser") and further in view of Wrona et al. (USPGPub No. 2002/0128983 A1, hereafter "Wrona").

11. Regarding claim 1, Briscoe discloses all the elements of the claimed invention including:

- a. specifying a number of services within a billing unit for the service provider and the service consumer ("set number of times," C1 L63 - C2 L24);
- b. generating a sequence of codes ("the hash chain") from a start code ("secret random number") to an end code ("value at the end of the hash chain"), the number of codes in the sequence corresponding to the specified number of services within the billing unit ("set number of times," C1 L63 - C2 L24);
- c. when the service consumer requests a service of the service provider, providing to the service provider one of the codes of the sequence from which the end code can be derived ("the user communicates to the vendor the value at the end of the hash chain," C1 L63 - C2 L24); and
- d. when the service provider has been provided by the service consumer with the start code, requesting payment for the billing unit ("The vendor may collect the money owed to it at any time by communicating the last revealed hash value to the broker's settlement interface," C7 L5-9).

12. However, although Briscoe discloses providing the end code to the service provider ("the user communicates to the vendor the value at the end of the hash chain," C2 L6-7), Briscoe fails to explicitly disclose providing the end code to the service provider via a service intermediary.

13. Both Frankel and Hauser teach selecting the start code, generating a sequence of codes (hash chain), and providing the end code to the service provider via a service intermediary (Frankel, Fig. 1 and associated text, C10 L15-21; Hauser, pgs. 2-7).

14. It would have been obvious to one having ordinary skill in the art at the time of the invention to modify the system of Briscoe to include the start code selection, code sequence generation, and provision of the end code to the service provider via a service intermediary of Frankel or Hauser in order to achieve the predictable result of reducing computational complexity for the service intermediary and distributing the computations required to calculate the hash chain to the individual service consumers.

15. However, neither the combination of Briscoe/Frankel nor the combination of Briscoe/Hauser explicitly discloses that the start code is generated by the service consumer.

16. Wrona teaches a service consumer ("payer") generating a start code ("w0, which is signed by the payer," [0061]).

17. It would have been obvious to one having ordinary skill in the art at the time of the invention to modify either the system of Briscoe/Hauser or Briscoe/Frankel to include the start code generation by the service consumer of Wrona in order to achieve the predictable result of repudiation by the service consumer ("the payment can not be repudiated," [0061]).

18. Regarding claims 6 and 17, Briscoe further discloses wherein the sequence is generated using a one-way function ("The user then uses a publicly known hash function ... The one-way nature of the hash function," C1 L63 - C2 L24).

19. Regarding claim 12, Briscoe further discloses wherein the service intermediary ("the broker") generates the sequence ("the broker generates a number of hash chains," C8 L21-22).

20. Regarding claims 13 and 14, Briscoe further discloses wherein the service provider provides services requested by the service consumer ("The vendor now delivers the goods to the client," C6 L48).

21. Claims 2, 3, 7-11, 15, 16, 18-21, as understood by the Examiner in light of the above 112 2<sup>nd</sup> paragraph rejections, are rejected under 35 U.S.C. 103(a) as being unpatentable over Briscoe/Frankel/Wrona or Briscoe/Hauser/Wrona and further in view of Examiner's Official Notice.

22. Regarding claims 2, 3, 7, 11, 15, 16, 18, although Briscoe discloses specifying different numbers of services for billing units, the combination of Briscoe/Frankel/Wrona or Briscoe/Hauser/Wrona does not disclose doing so for different customers based on the risk tolerance of the provider or in order to minimize transaction costs. However, the Examiner takes Official Notice that it was old and well known in the art at the time of the invention for a business to calculate the amount of credit it is willing to extend and quantity of service per billing unit it is willing to provide based on risk tolerance and transaction costs because to do otherwise would negatively impact the profitability of a company. Therefore, it would have been obvious to combine the varying services per billing unit based on risk tolerance and transaction costs of Examiner's Official Notice with the system of Briscoe/Frankel/Wrona or Briscoe/Hauser/Wrona in order to achieve

the predictable result of increasing profitability by reducing risk of credit default and decreasing the amount of transaction costs incurred.

23. Regarding claims 8-10 and 19-21 Briscoe/Frankel/Wrona or Briscoe/Hauser/Wrona disclose all the elements of the claimed invention including that the service intermediary ("the bank") resolves disputes (Briscoe, "The bank checks that the value is that expected for the tenth hash value generated from the relevant random secret number," C1 L63 - C2 L24). But both Briscoe/Frankel/Wrona and Briscoe/Hauser/Wrona fail to explicitly disclose resolving the dispute one way or the other based on the result of the hash value check. However, the Examiner takes Official Notice that it was old and well known in the art at the time of the invention for a trusted third party or intermediary to resolve disputes in favor of the party that the evidence favors in order to maintain the trust of both parties. It would have been obvious to a person having ordinary skill in the art at the time of the invention to modify the system of Briscoe/Frankel/Wrona or Briscoe/Hauser/Wrona to include the dispute resolution based on evidence of Examiner's Official Notice in order to promote trust of and thereby use of the intermediary.

### ***Double Patenting***

24. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory



obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

25. A timely filed terminal disclaimer in compliance with 37 C.F.R. §§ 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

26. Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 C.F.R. § 3.73(b).

27. Claims 1-21 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-40 of copending Application No. 10/789,808. Although the conflicting claims are not identical, they are not patentably distinct from each other because all of the positively recited method steps of claims 1-21 are disclosed in claims 1-40 of the copending application.

28. This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

### ***Claim Interpretation***

29. Independent claims (1 and 14) are examined together, since they are not patentably distinct. If Applicant expressly states on the record that two or more independent and distinct inventions are claimed in this application, the Examiner may require the applicant to elect an invention to which the claims will be restricted.

30. Any Official Notices taken by the Examiner that are not adequately traversed by Applicant will be taken to be admitted prior art.

31. Regarding claims 1, 8, 9, 10, 14, and 19-21, the USPTO interprets claim limitations that contain statements such as “*if, may, might, can, could, when, potentially, possibly*”, as optional language (this list of examples is not intended to be exhaustive).

As matter of linguistic precision, **optional claim elements do not narrow claim limitations**, since they can always be omitted (*In re Johnston*, 77 USPQ2d 1788 (Fed. Circ. 2006)). They will be given less patentable weight, because language that suggests or makes optional but does not require steps to be performed or does not limit a claim to a particular structure does not limit the scope of a claim or claim limitation. In the interest of compact prosecution, the optional elements of the above-identified claims have been treated as positive limitations where possible in anticipation of an amendment by Applicant to make them positive limitations.

***Response to Arguments***

32. The Examiner expresses his appreciation for Applicant's citation on pg. 8 of the remarks filed February 24, 2009 of the relevant portion of the specification where Applicant believes support for the amendments can be found. The Examiner's search for support for these amendments was not limited to this portion of the specification. The Examiner further notes that at least paragraphs [0032] and [0033] provide support for the "by the processor" amendments made by Applicant.

33. Applicant's arguments with respect to the §101 rejections of the claims have been fully considered and are persuasive. These §101 rejections of the previous Office action have been withdrawn.

34. Applicant's arguments with respect to the §112, 2<sup>nd</sup> paragraph rejections of claims 1 and 14 have been fully considered and are persuasive. These §112, 2<sup>nd</sup> paragraph rejections of the previous Office action have been withdrawn.

35. Applicant's arguments with respect to the §112, 2<sup>nd</sup> paragraph rejections of claims 2, 3, 15, and 16 due to the recitations "based on willingness of the service provider to be exposed to non-payment by that service consumer" and "indicates the number of services for which the service provider is willing to be exposed to non-payment by the service consumer" have been fully considered, but they are not persuasive. Applicant explains why and gives an example to illustrate how a service provider would vary the services per billing unit in order to control risk. That risk-mitigation is a motivation for a service provider to vary the number of services per billing unit is not disputed by the Examiner. Properly assessing the scope of these claims

requires assessing the mindset of the service provider. Regarding claims 2 and 3, it would be impossible for a service consumer practicing a method similar to the claimed invention to determine the reason that a service provider set a number of services per billing unit. As this is not possible for the service consumer (the potential infringer) to determine, these claims lack the clarity required to put the public on notice of what Applicant considers to be his invention. Similarly, for claims 15 and 16, determination of infringement would require assessing the motivation of a service consumer setting a number of services per billing unit. Therefore, these §112, 2<sup>nd</sup> paragraph rejections of the previous Office action have been maintained.

36. Applicant's arguments with respect to the §103 rejections of the claims have been considered but are moot in view of the new grounds of rejection.

### ***Conclusion***

37. Applicant's amendment filed February 24, 2009 necessitated the new grounds of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 C.F.R. § 1.136(a).

38. A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the

shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 C.F.R. § 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

39. References considered pertinent to Applicant's disclosure are listed on form PTO-892. All references listed on form PTO-892 are cited in their entirety.

40. The Examiner has cited particular column, line, and/or paragraph numbers in the references as applied to the claims above for the convenience of the Applicant.

Although the specified citations are representative of the teachings in the art and are applied to the specific limitations within the individual claim, other passages and figures may be applied as well. It is respectfully requested from the Applicant, in preparing responses, to fully consider a reference in its entirety as potentially teaching all or part of the claimed invention as well as the context of the passage as taught by the prior art or disclosed by the Examiner.

41. Because this application is now final, Applicant is reminded of the USPTO's after final practice as discussed in MPEP §714.12 and §714.13 and that entry of amendments after final is *not* a matter of right. "The refusal of an examiner to enter an amendment after final rejection of claims is a matter of discretion." *In re Berger*, 279 F.3d 975, 984, 61 USPQ2d 1523, 1529 (Fed. Cir. 2002) (citations omitted).

Furthermore, suggestions or examples of claim language provided by the Examiner are just that--suggestions or examples--and do not constitute a formal requirement mandated by the Examiner. Unless stated otherwise by an express indication that a claim is "allowed," exemplary claim language provided by the Examiner to overcome a particular rejection or to change claim interpretation has *not* been addressed with respect to other aspects of patentability (e.g. §101 patentable subject matter, §112 1<sup>st</sup> paragraph written description and enablement, §112 2<sup>nd</sup> paragraph indefiniteness, and §102 and §103 prior art). Therefore, any claim amendment submitted under 37 C.F.R. §1.116 that incorporates an Examiner suggestion or example or simply changes claim interpretation will nevertheless require further consideration and/or search and a patentability determination as noted above.

42. Any inquiry concerning this communication or earlier communications from the Examiner should be directed to Jamie Kucab whose telephone number is 571-270-3025. The Examiner can normally be reached on Monday-Friday 9:30am-6:00pm EST.

43. If attempts to reach the Examiner by telephone are unsuccessful, the Examiner's supervisor, Andrew Fischer can be reached on 571-272-6779. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

44. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for

published applications may be obtained from either Private PAIR or Public PAIR.

Status information for unpublished applications is available through Private PAIR only.

For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

JK

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